

Figure 1 Torque vs. Time Chart for Reactive Extrusion of PHBV with HEMA

TQ: 0-20 Nm

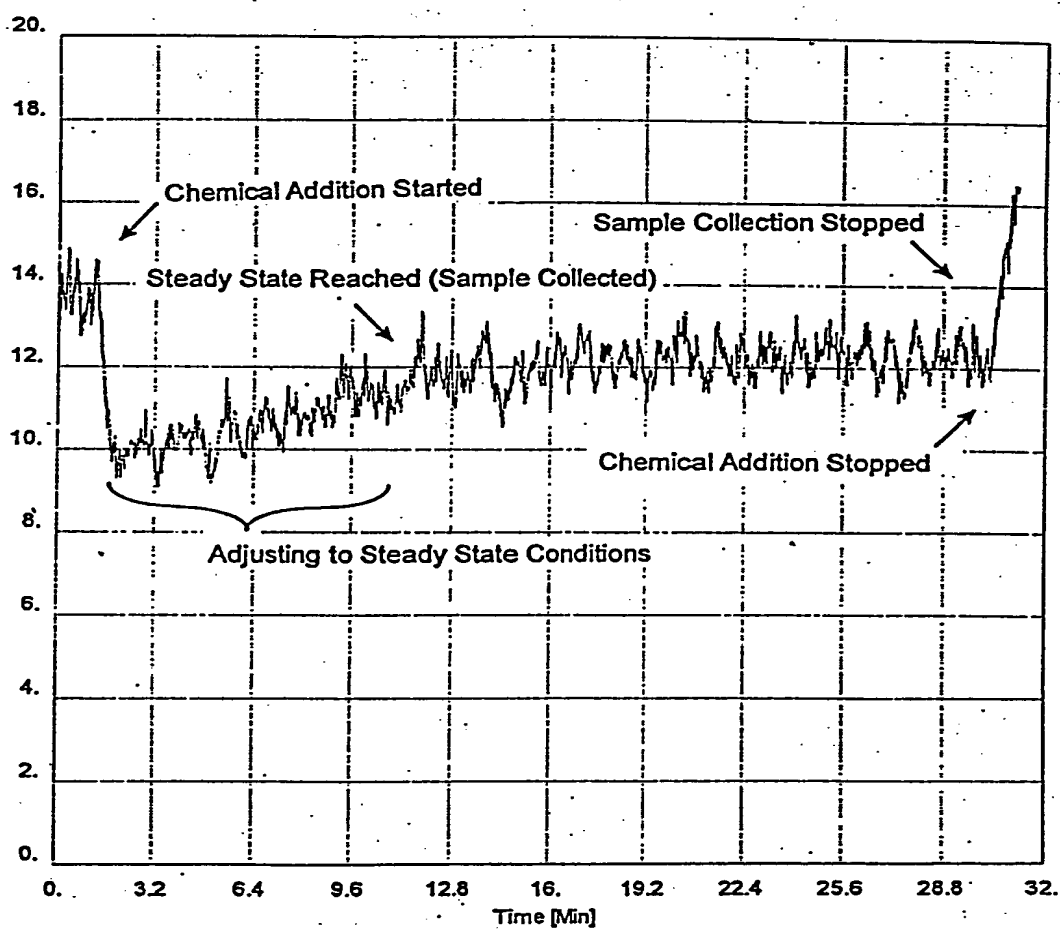


Figure 2 Proton NMR Spectra for PHBV and HEMA Grafted PHBV

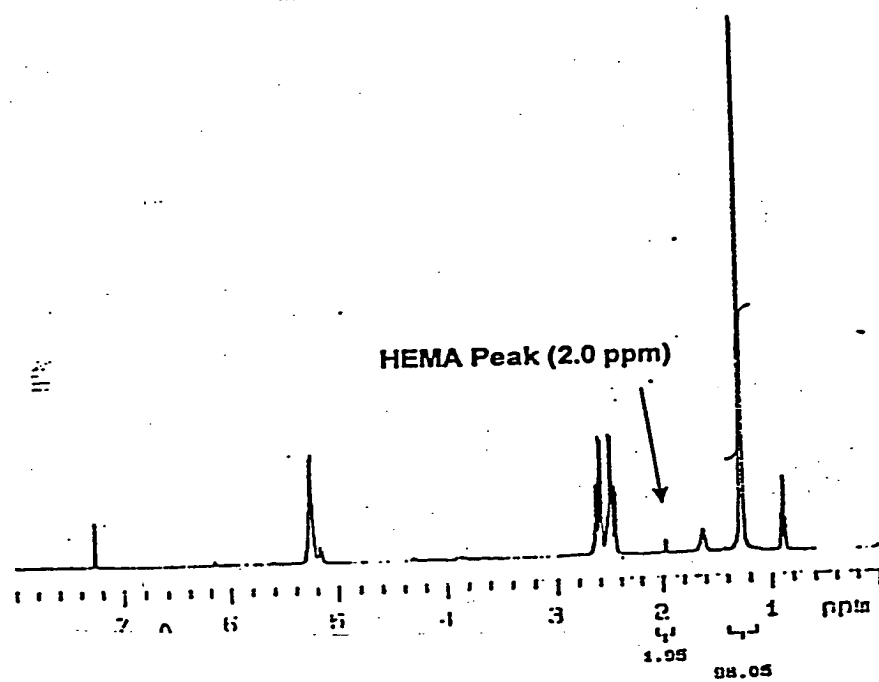
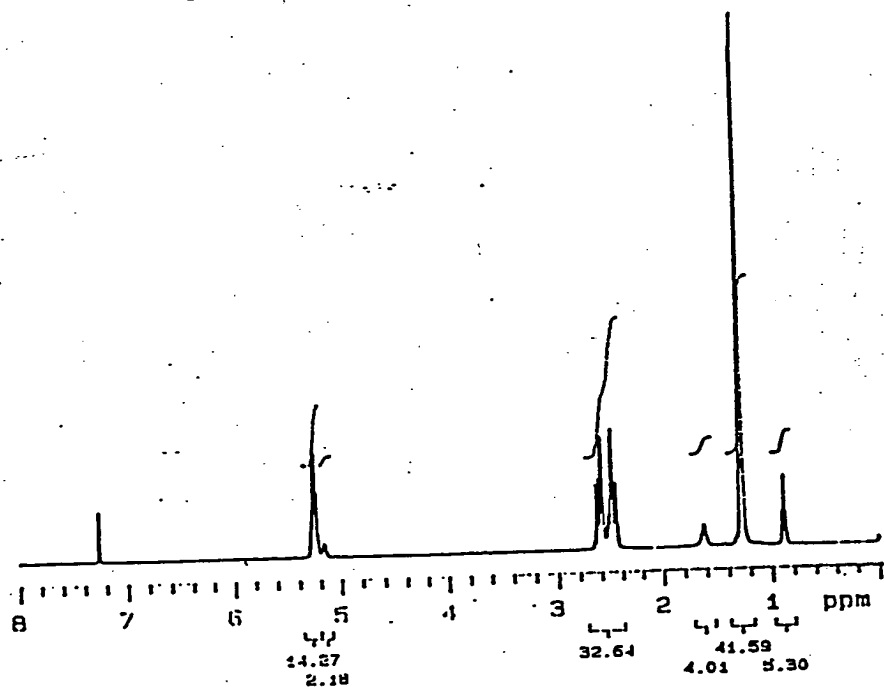


Figure 3 Melt Rheology at 180°C for PHBV and HEMA Grafted PHBV

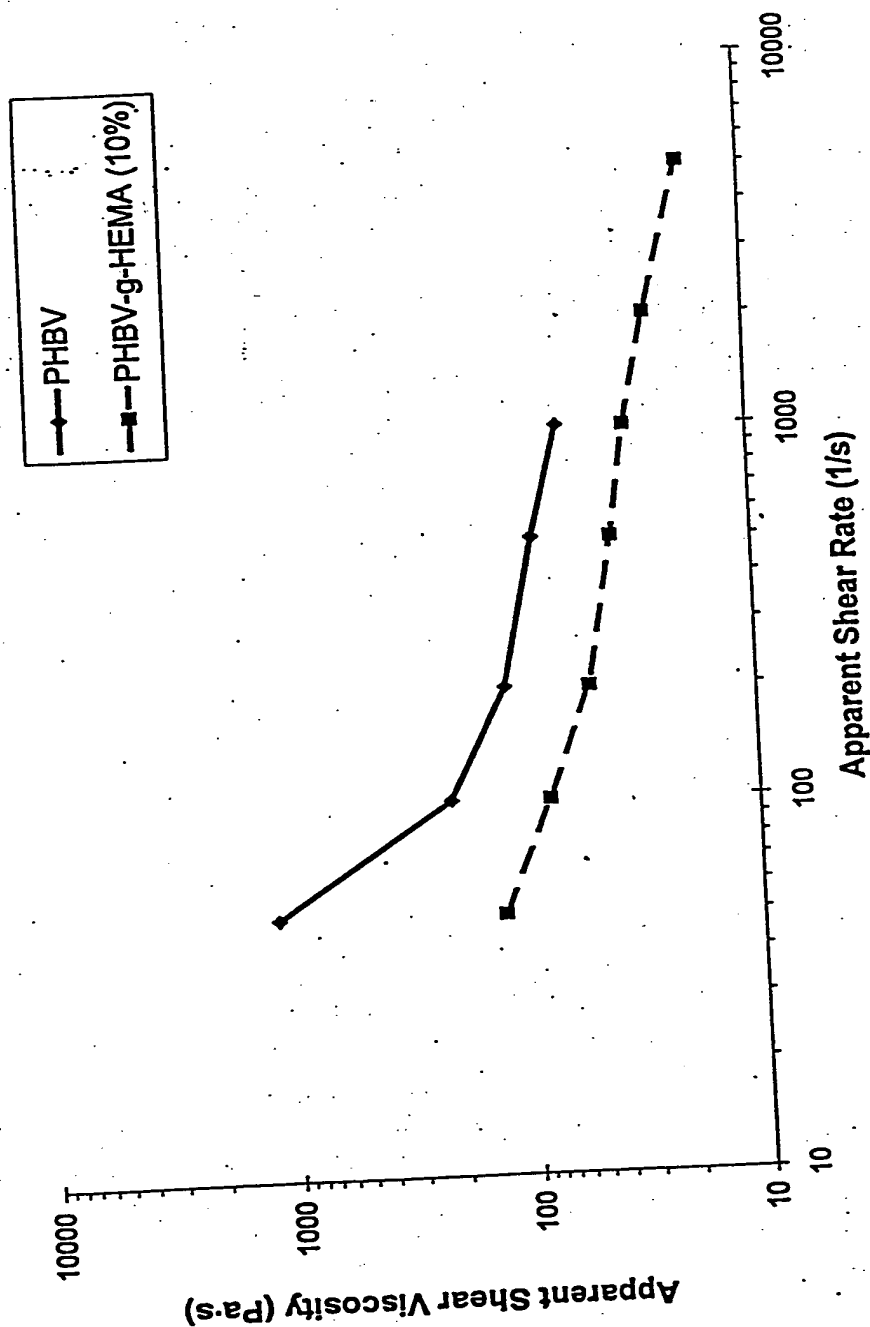
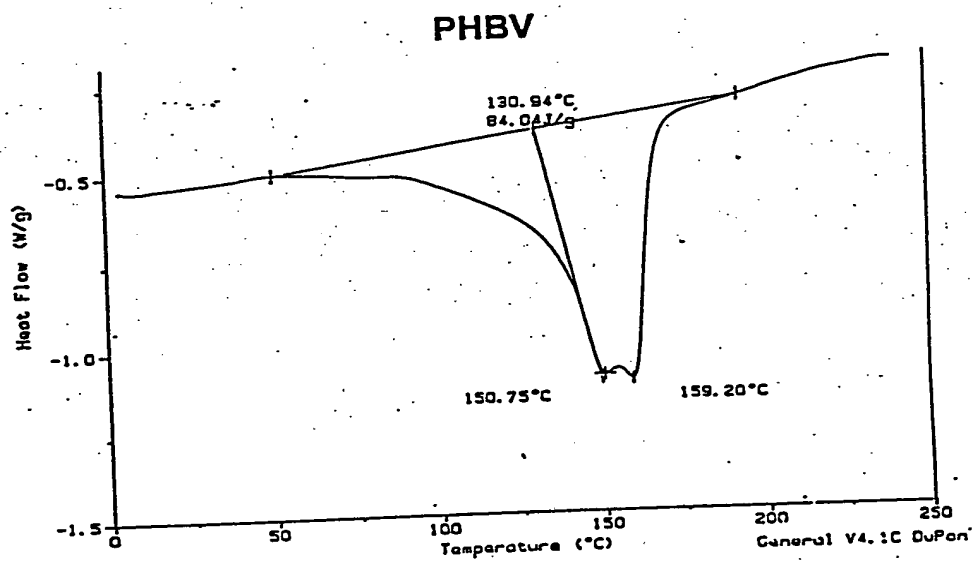
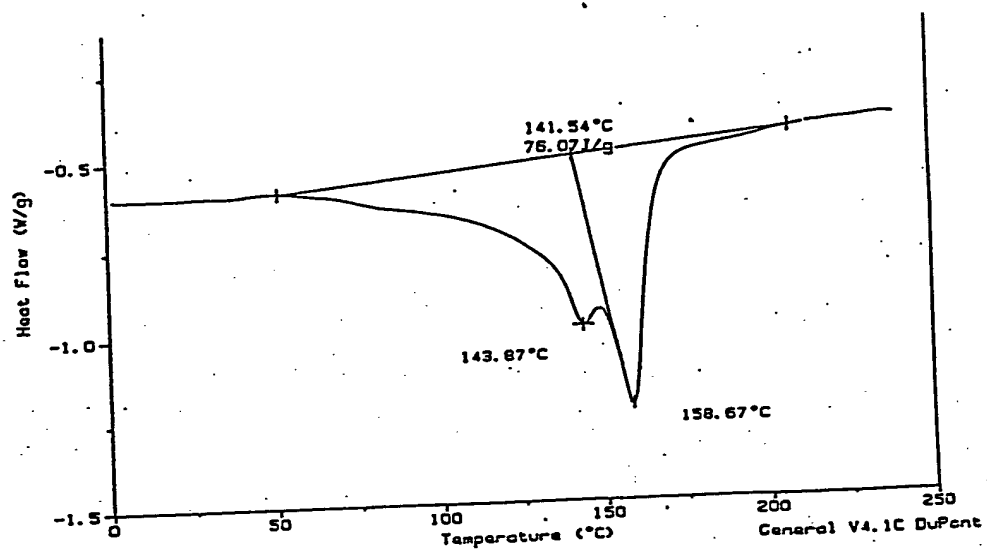


Figure 4 DSC Thermogram for PHBV and HEMA Grafted PHBV



HEMA Grafted PHBV



T0E240"/20E5/60

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Figure 5 Torque vs. Time Chart for Reactive Extrusion of PBS 1040 with PEGMA on the Haake Extruder

TQ: 0-1500 m.g

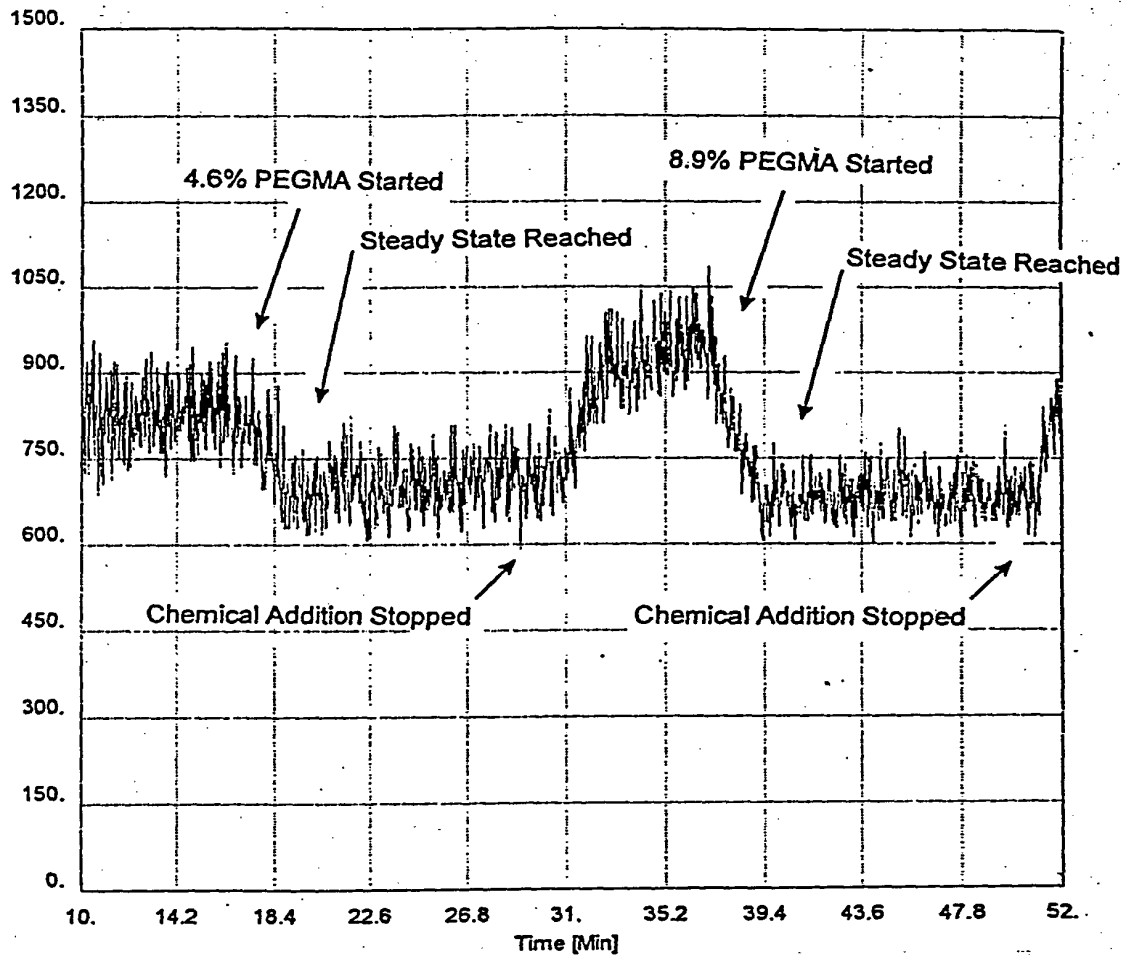


Figure 6 Proton NMR Spectra for PBS and PEGMA Grafted PBS 1040

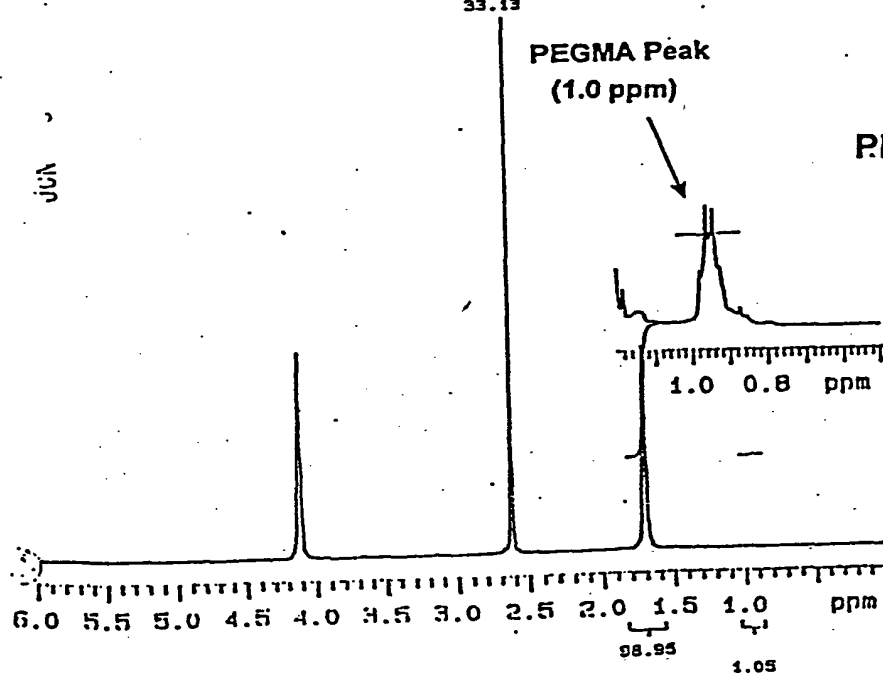
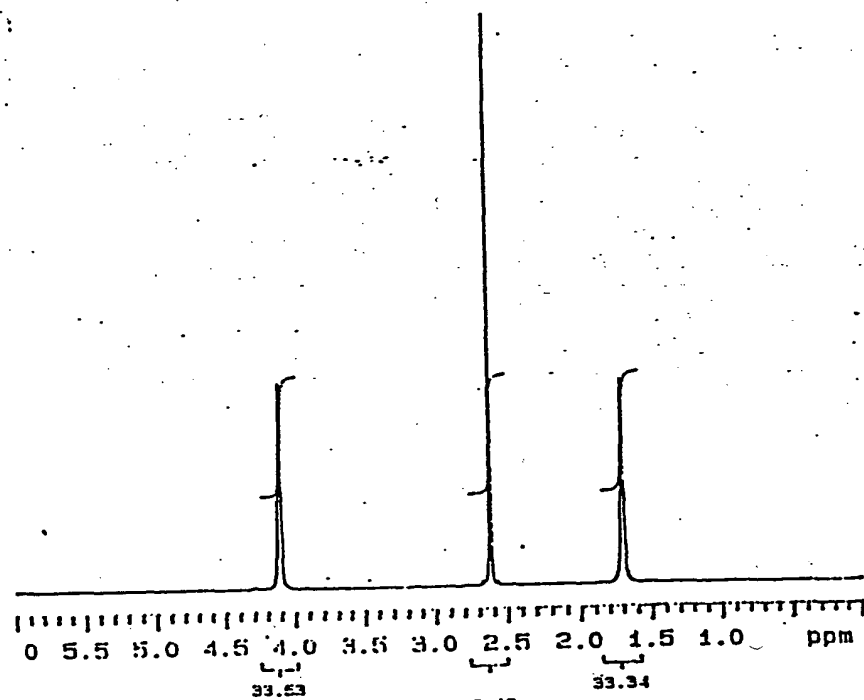


Figure 7 Melt Rheology at 180°C for PBS and PEGMA Grafted PBS (Bionolle® 1040)

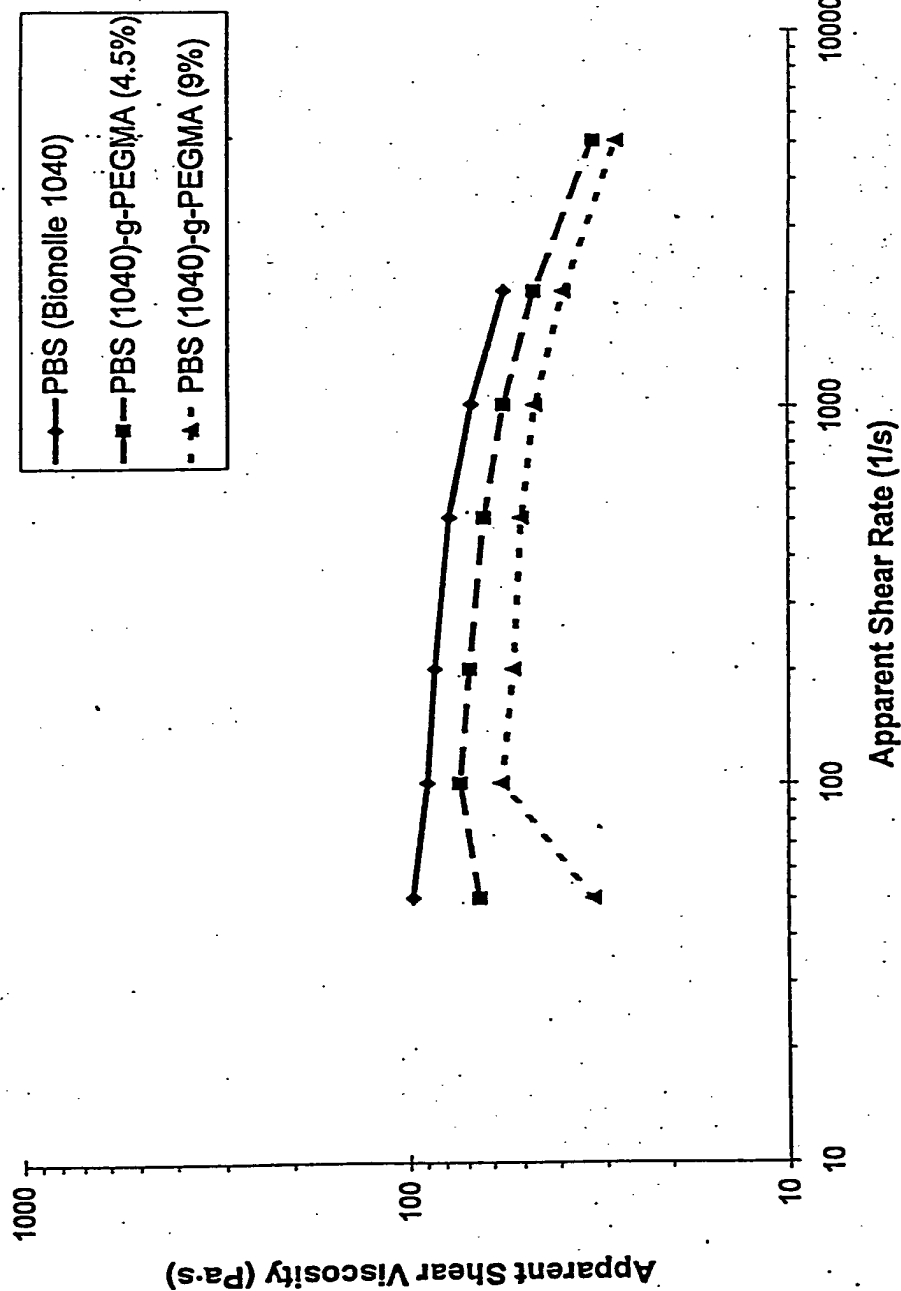


Figure 8 Melt Rheology at 180°C for PBS and HEMA Grafted PBS (Bionolle® 1020)

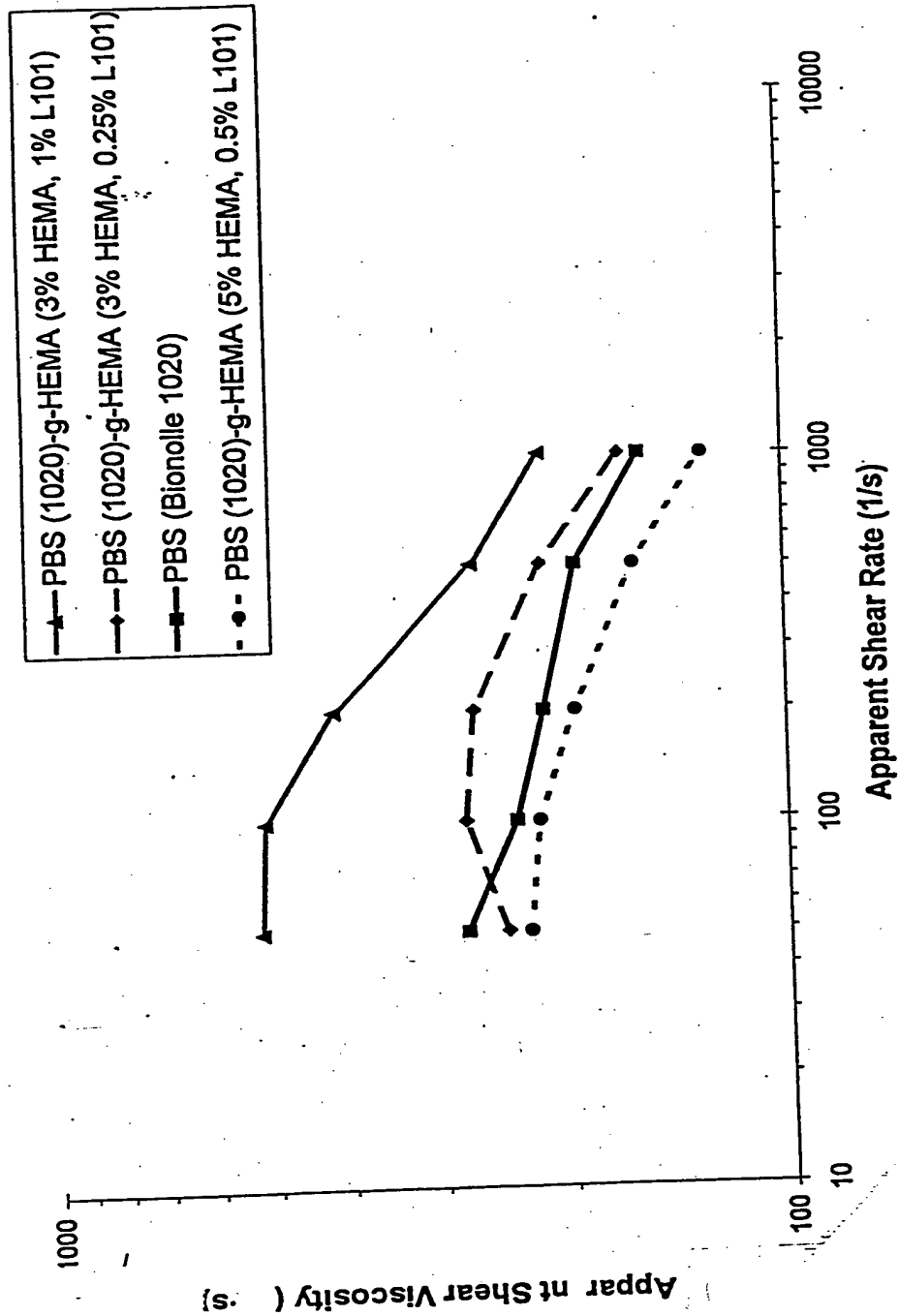
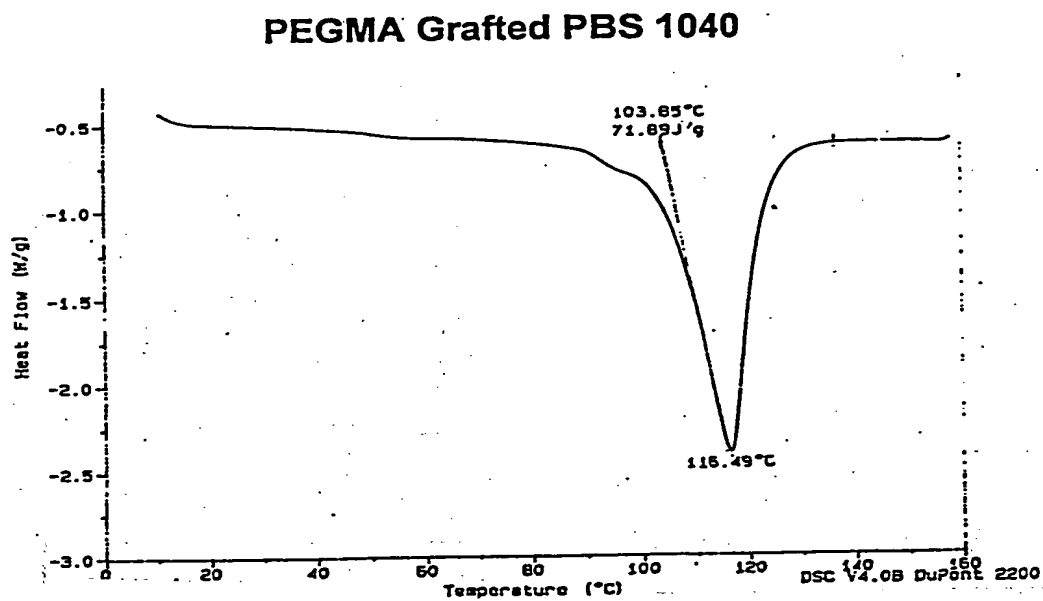
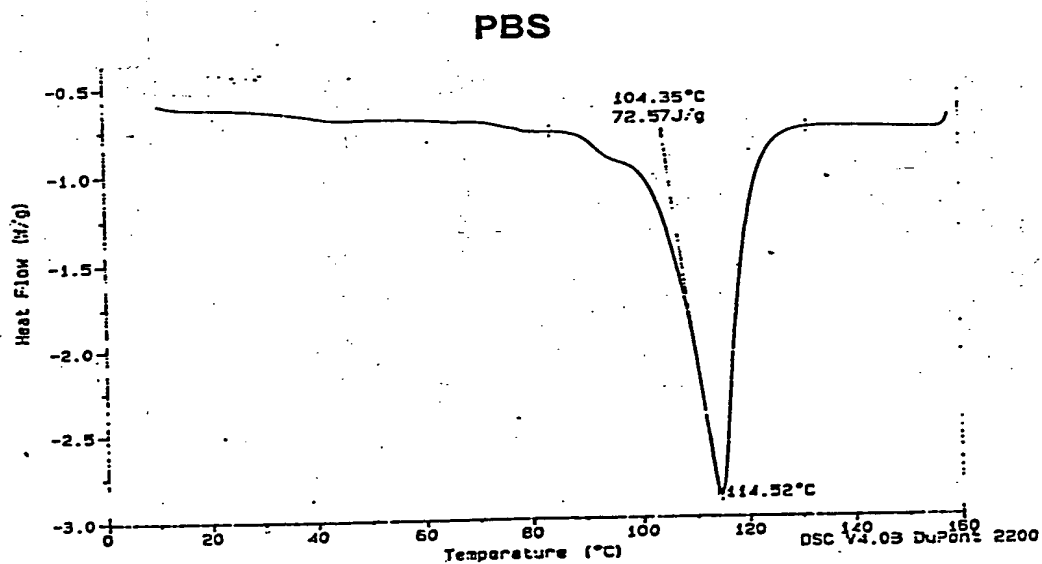
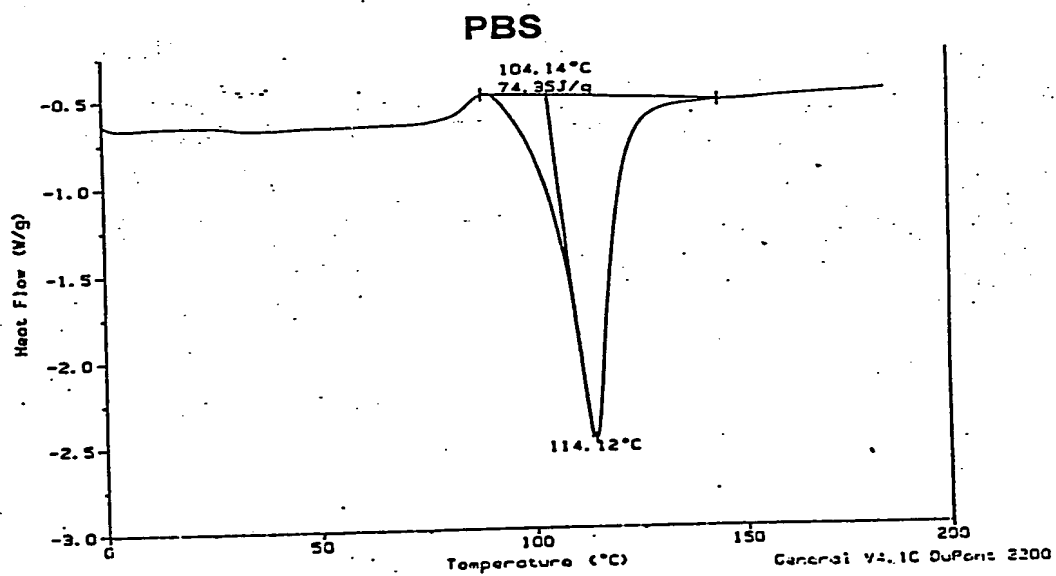


Figure 9 DSC Thermogram for PBS and PEGMA Grafted PBS 1040

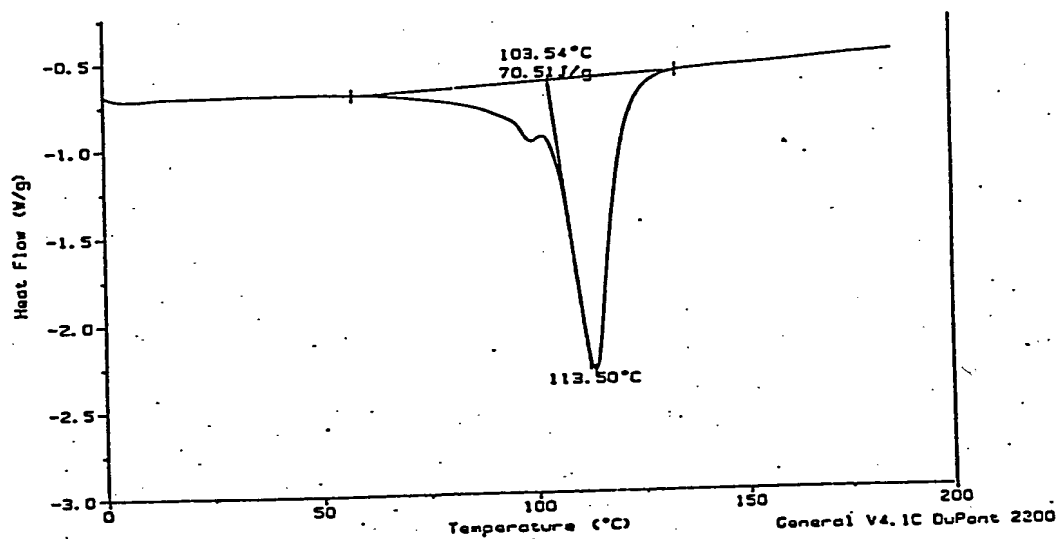


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Figure 10 DSC Thermogram for PBS and HEMA Grafted PBS 1020



HEMA Grafted PBS 1020



FOE240" / 0ES/60

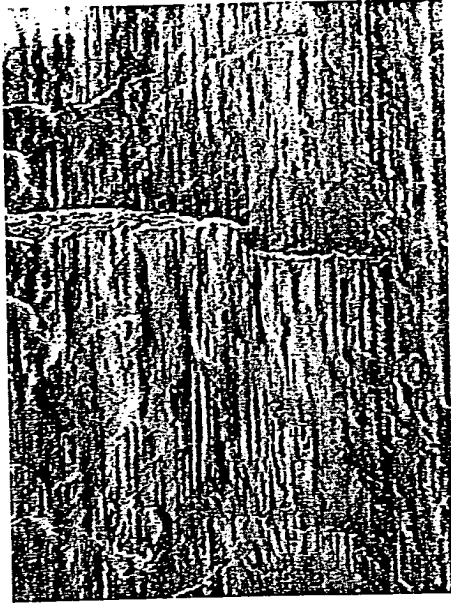
Figure 11



— 10 µm

TOE240" 2025260

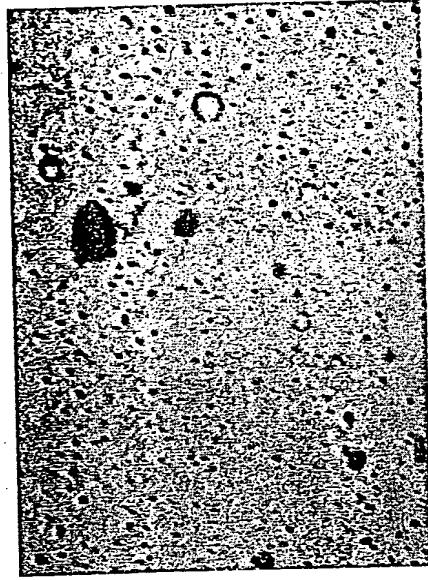
Figure 12



— 10 µm

TOE240" / 0ES/60

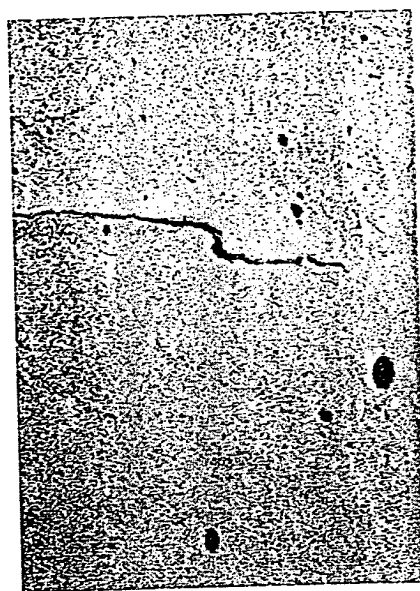
Figure 13



— 10 μm

TOE240" / 20ES/60

Figure 14



— 10 μm

Figure 15
 T_m of PEO Phase of Reactive Blends

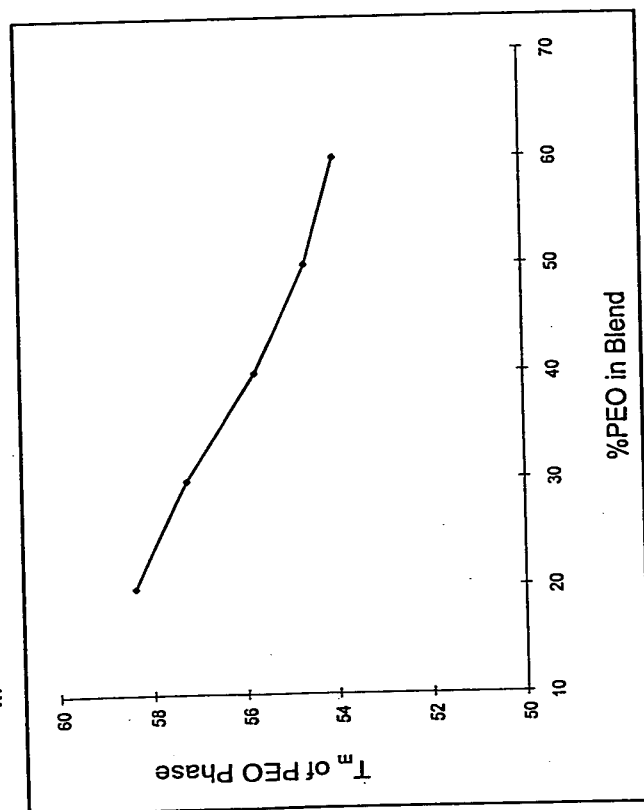


Figure 16

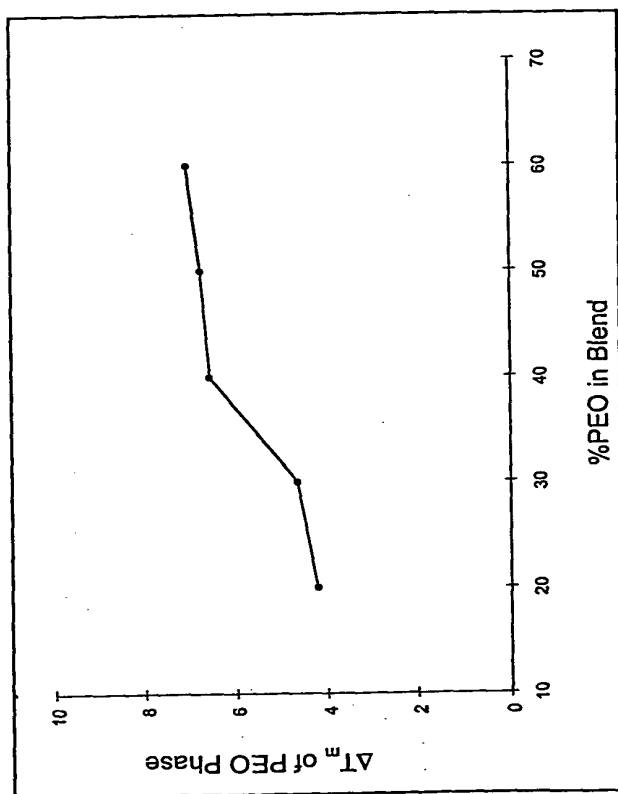
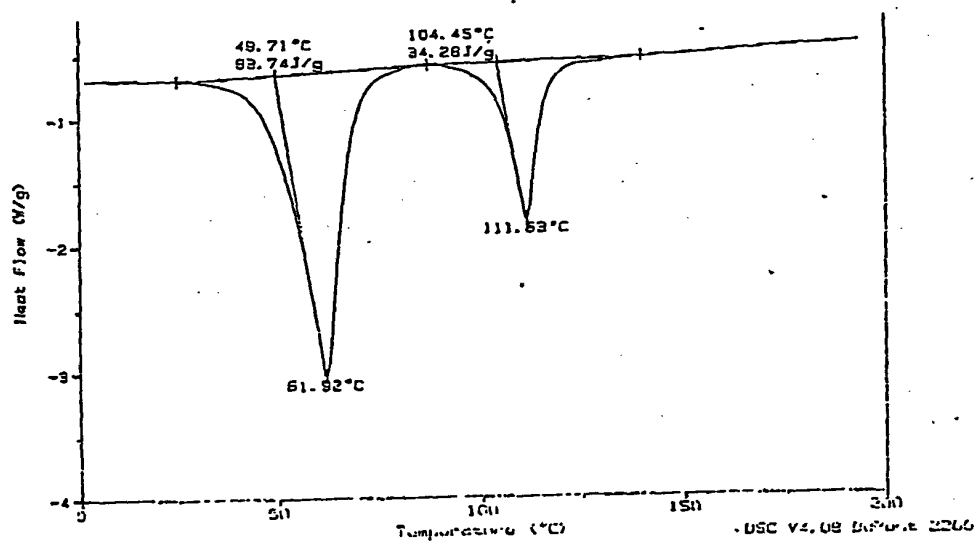
 $\Delta T_m = T_m \text{ (PEO Phase of Physical Blends)} - T_m \text{ (Reactive Blends)}$ 

Figure 17 DSC Thermograms for PBS/PEO Physical and Reactive Blends

30/70 PBS/PEO Physical Blend



30/70 PBS/PEO Reactive Blend

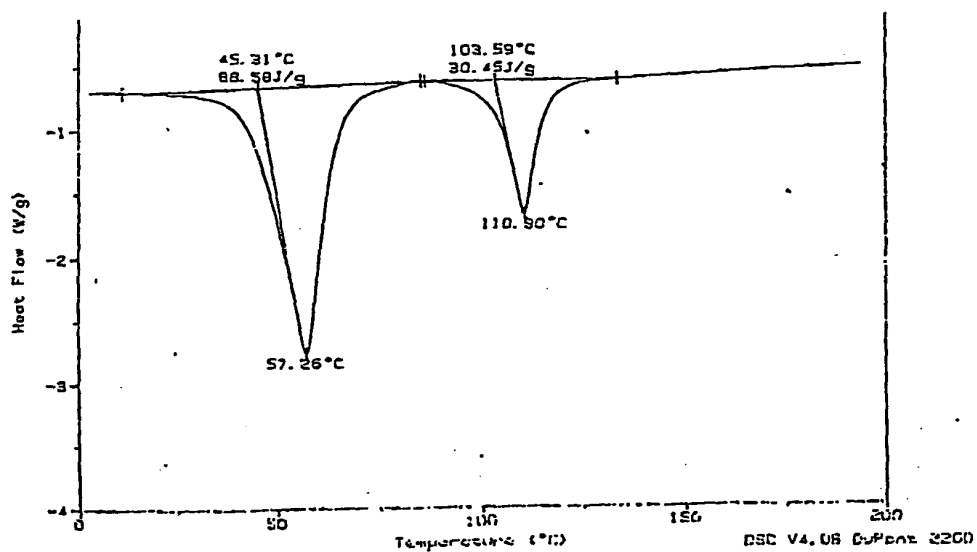


Figure 18 Melt Rheology at 195°C for PBS/PEO Physical and Reactive Blends

